

VIA FACSIMILE 1-703-872-9306

9D-HR- 19209
PATENT**Remarks**

The Office Action mailed January 9, 2004 has been carefully reviewed and the following remarks are made in consequence thereof.

Claims 1-3, 5-11, and 12-52 are now pending in this application. Claims 4 and 12 have been canceled without prejudice, waiver, or disclaimer. Claims 1, 2, 10, 11, 15, and 16 are rejected. Claims 12-14 are objected to as being dependent upon a rejected base claim, but are indicated as allowable if rewritten in independent form including all of the limitation(s) of the base claim and any intervening claims. Applicants thank the Examiner for allowing the claims objected to, if the claims are rewritten in independent form. Claims 3, 5-9, and 17-52 are allowed. Claims 1, 3, 10, 13, 14, 28, 29, 51, and 52 have been amended. No new matter has been added.

The rejection of Claims 1, 2, 10, 11, 15, and 16 under 35 U.S.C. § 102(b) as being anticipated by Jamieson et al. (U.S. Patent 5,408,573) is respectfully traversed.

Jamieson et al. describe a motor voltage sensor (530) that senses a voltage across a motor (300) (column 7, lines 57-58). If the voltage across the motor is too large, the motor voltage sensor sends a control signal at a first conductor (532) to a motor control signal generator (520) (column 7, lines 58-60). The motor control signal generator reduces a duty cycle of a signal at a second conductor (522) in response to the signal at the first conductor (column 7, lines 61-63). The sensor provides signals so that the generator adjusts the duty from 100% to 0% over an approximately 9 to 16 VDC operating range of a source (15) (column 7, lines 63-66). Thus, the voltage sensor provides a closed loop response which controls the speed of the motor (column 7, lines 66-68).

VIA FACSIMILE 1-703-872-9306

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Claim 1 recites a method for controlling speed in a pulse-width-modulation-controlled motor powered by a load voltage source, the method including the steps of "diagnosing functionality of the motor; measuring the motor load voltage, wherein said step of measuring the motor load voltage further comprises utilizing at least one switching element to bypass a resistive element; and setting pulse-width modulation duty cycles based on the measured voltage, wherein an average of frequencies of the pulse-width modulation duty cycles is a predetermined average pulse-width modulation frequency of the motor."

Jamieson et al. does not describe or suggest a method for controlling speed in a pulse-width-modulation-controlled motor powered by a load voltage source, the method including the steps of diagnosing functionality of the motor, measuring the motor load voltage, where the step of measuring the motor load voltage further includes utilizing at least one switching element to bypass a resistive element, and setting pulse-width modulation duty cycles based on the measured voltage, where an average of frequencies of the pulse-width modulation duty cycles is a predetermined average pulse-width modulation frequency of the motor.

Moreover, Jamieson et al. does not describe or suggest diagnosing functionality of the motor. Rather, Jamieson et al. describe sensing a voltage across the motor. For the reasons set forth above, Claim 1 is submitted to be patentable over Jamieson et al.

Claim 2 depends from independent Claim 1. When the recitations of Claim 2 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claim 2 likewise is patentable over Jamieson et al.

Claim 10 has been amended to include the recitations of Claim 12, which is objected to as being dependent upon a rejected base claim, but containing allowable subject

VIA FACSIMILE 1-703-872-9306

9D-HR- 19209
PATENT

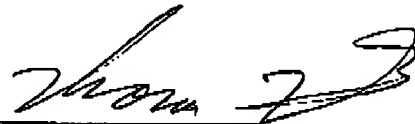
matter. For the reasons set forth above, Claim 10 is submitted to be patentable over Van Jamieson et al.

Claim 12 has been canceled. Claims 11, 15, and 16 depend from independent Claim 10. When the recitations of Claims 11, 15, and 16 are considered in combination with the recitations of Claim 10, Applicants submit that Claims 11, 15, and 16 likewise are patentable over Jamieson et al.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1, 2, 10, 11, 15, and 16 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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